Report for the purposes of Appropriate Assessment Screening

OPW Modular Homes Backweston, Co. Dublin

Prepared by: Moore Group – Environmental Services

27 November 2023



On behalf of The Commissioners of Public Works in Ireland on behalf of the Department for Children, Equality, Disability, Integration and Youth

Project Proponent	Office of Public Works	
Project	OPW Modular Homes Backweston	
Title	Report for the purposes of Appropriate Assessment Screening OPW Modular Homes Backweston	

Project Number	22161	Document Ref	22161 OPW Backweston AAS1 Rev	0
Revision	Description	Author		Date
Rev0	Issued to Client	G. O'Donohoe	Ope D' You have	24 July 2023
Rev1	Final	G. O'Donohoe	Ops D' Southor	27 November 2023
Moore Archaeological and Environmental Services Limited				

Table of Contents

1.	Inti	roduction	1
	1.1.	General Introduction	1
	1.2.	Legislative Background - The Habitats and Birds Directives	1
2.	Me	ethodology	2
	2.1.	Guidance	3
	2.2.	Data Sources	4
3.	Des	scription of the Proposed Development	4
4.	Ide	ntification of Natura 2000 Sites	9
	4.1.	Description of Natura Sites Potentially Significantly Affected	9
	4.2.	Ecological Network Supporting Natura 2000 Sites	12
5.	Ide	ntification of Potential Impacts & Assessment of Significance	12
	5.1.	Assessment of Likely Significant Effects	12
	5.2.	Assessment of Potential In-Combination Effects	14
6.	Cor	nclusion	15
7.	Ref	ferences	16

Abbreviations

AA Appropriate Assessment

ABP An Bord Pleanála

CEMP Construction Environmental Management Plan

EEC European Economic Community

EPA Environmental Protection Agency

EU European Union

FWPM Freshwater Pearl Mussel

GIS Geographical Information System

LAP Local Area Plan

NHA Natural Heritage Area

NIS Natura Impact Statement

NPWS National Parks and Wildlife Service

OSI Ordnance Survey Ireland

pNHA proposed Natural Heritage Area

SAC Special Area of Conservation

SPA Special Protection Area

SuDS Sustainable Drainage System

UÉ Uisce Éireann

WFD Water Framework Directive

1. Introduction

1.1. General Introduction

This report for the purposes of Appropriate Assessment (AA) Screening contains information required for the competent authority to undertake screening for Appropriate Assessment (AA) in respect of the construction and operation of a residential development of modular homes at a site in Backweston, Co. Dublin (hereafter referred to as the Proposed Development) to determine whether it is likely individually or in combination with other plans or projects to have a significant effect on any European sites, in light of best scientific knowledge.

Having regard to the provisions of the Planning and Development Act 2000 – 2021 (the "Planning Acts") (section 177U), the purpose of a screening exercise under section 177U of the PDA 2000 is to assess, in view of best scientific knowledge, if the proposed development, individually or in combination with other plans or projects is likely to have a significant effect on a European site.

If it cannot be *excluded* on the basis of objective information that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site then it is necessary to carry out a Stage 2 appropriate assessment under section 177V of the Planning Acts.

When screening the project, there are two possible outcomes:

- the project poses no potential for the possibility of a significant effect and as such requires no Stage 2
 assessment; or
- the project has potential to have a significant effect (or this is uncertain and therefore cannot be excluded) and therefore a Stage 2 Appropriate Assessment of the project is necessary.

This report has been prepared by Moore Group - Environmental Services to enable the competent authority to carry out AA screening in relation to the Proposed Development. The report was compiled by Ger O'Donohoe B.Sc. Applied Aquatic Sciences (ATU Galway, 1993) & M.Sc. Environmental Sciences (TCD, 1999) who has 30 years' experience in environmental impact assessment and has completed numerous Appropriate Assessment Screening Reports and Natura Impact Statements on terrestrial and aquatic habitats for various development types.

1.2. Legislative Background - The Habitats and Birds Directives

Article 6(3) and 6(4) of the Habitats Directive are transposed into Irish Law inter alia by the Part XAB of the Planning Acts (in particular section 177U and 177V) which governs the requirement to carry out appropriate assessment screening and appropriate assessment, where required, per Section 1.1 above.

The Habitats Directive (Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora) is the main legislative instrument for the protection and conservation of biodiversity in the European Union (EU). Under the Habitats Directive, Member States are obliged to designate Special Areas of Conservation (SACs) which contain habitats or species considered important for protection and conservation in a EU context.

The Birds Directive (Council Directive 2009/147/EC on the conservation of wild birds), transposed into Irish law by the Bird and Natural Habitats Regulations 2011 as amended, and the Wildlife Act 1976, as amended, is concerned with the long-term protection and management of all wild bird species and their habitats in the EU. Among other things, the Birds Directive requires that Special Protection Areas (SPAs) be established to protect migratory species and species which are rare, vulnerable, in danger of extinction, or otherwise require special attention.

SACs designated under the Habitats Directive and SPAs, designated under the Birds Directive, form a pan-European network of protected sites known as Natura 2000. The Habitats Directive sets out a unified system for the protection and management of SACs and SPAs. These sites are also referred to as European sites.

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to have a significant effect on Natura 2000 sites.

Article 6(3) establishes the requirement to screen all plans and projects and to carry out an appropriate assessment if required (Appropriate Assessment (AA)). Article 6(4) establishes requirements in cases of imperative reasons of overriding public interest:

Article 6(3): "Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to an appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

2. Methodology

The Commission's methodological guidance (EC, 2002, 2018, 2021 see Section 2.1 below) promotes a four-stage process to complete the AA and outlines the issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

Stages 1 and 2 deal with the main requirements for assessment under Article 6(3). Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4).

Stage 1 Screening: This stage examines the likely effects of a project either alone or in combination with other projects upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant. In order to screen out a project, it must be excluded, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

Stage 2 Appropriate Assessment: This stage examines whether it is likely that the project, either alone or in combination with other projects or plans, will have a significant effect upon a European site. In order to 'screen out' a project (i.e. in order to conclude that it is not necessary to move to the 'Stage 2' appropriate assessment stage (see immediately below), the possibility that the Proposed Development (individually or in combination with other plans or projects), will have a significant effect on a European site must be excluded on the basis of objective information.

Stage 3 Assessment of Alternative Solutions: This stage examines alternative ways of implementing the project that, where possible, avoid any adverse impacts on the integrity of the Natura 2000 site.

Stage 4 Assessment where no alternative solutions exist and where adverse impacts remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the sites will be necessary.

To ensure that the Proposed Development complies fully with the requirements of Article 6 of the Habitats Directive and all relevant Irish transposing legislation, Moore Group compiled this report to enable the competent authority to carry out AA screening in relation to the Proposed Development to determine whether it can be excluded, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site(s).

2.1. Guidance

This report has been compiled in accordance with guidance contained in the following documents:

- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities.
 (Department of Environment, Heritage and Local Government, 2010 rev.).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.
 Circular NPWS 1/10 & PSSP 2/10.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC, 2018).
- Guidance document on the strict protection of animal species of Community interest under the Habitats Directive (EC, 2021).
- Assessment of plans and projects in relation to Natura 2000 sites Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2021).

 Office of the Planning Regulator (OPR) Practice Note PN01 Appropriate Assessment Screening for Development Management (OPR, 2021).

2.2. Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites, and the environment within which they are located, are listed below:

- The following mapping and Geographical Information Systems (GIS) data sources, as required:
 - National Parks & Wildlife (NPWS) protected site boundary data;
 - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
 - o OSI/Environmental Protection Agency (EPA) rivers and streams, and catchments;
 - Digital Elevation Model over Europe (EU-DEM);
 - Google Earth and Bing aerial photography 1995-2023;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS)
 from www.npws.ie including:
 - Natura 2000 Standard Data Form;
 - Conservation Objectives;
 - Site Synopses;
- National Biodiversity Data Centre records;
 - Online database of rare, threatened and protected species;
 - o Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans;
 - o South Dublin County Development Plan 2022-2028

3. Description of the Proposed Development

The Proposed Development with consist of 132 no. modular housing units at Backweston, Co. Dublin. Each unit with have private rear garden spaces, semi private front curtilage areas. Works will include pavements, public lighting, planting strips and verges, roads and on street parking. Access will be from the Backweston Road.

A habitat survey was carried out by Moore Group on 26 April 2023. Areas which were highlighted during desktop assessment were investigated in closer detail according to the Heritage Council Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2011). Habitats in the proposed development area were classified according to the Heritage Council publication "A Guide to Habitats in Ireland" (Fossitt, 2000). This publication sets out a standard scheme for identifying, describing and classifying wildlife habitats in Ireland. This form of

classification uses codes to classify different habitats based on the plant species present. Species recorded in this report are given in both their Latin and English names. Latin names for plant species follow the nomenclature of "An Irish Flora" (Parnell & Curtis, 2012).

Signs of mammals such as badgers and otters were searched for while surveying the study area noting any sights, signs or any activity in the vicinity especially along adjacent boundaries.

Birds were surveyed using standard transect methodology and signs were recorded where encountered during the field walkover surveys.

The proposed development site consists of a field of Arable crops (BC1). No flora or terrestrial fauna species or habitats of national or international conservation importance were noted on site during the survey.

There were no invasive species recorded at the proposed development site.

There are no water courses on site and drainage is internal and to ground.

Figure 1 shows the Proposed Development location and Figure 2 shows a detailed view of the Proposed Development boundary on recent aerial photography. Figure 3 shows the layout of the Proposed Development.

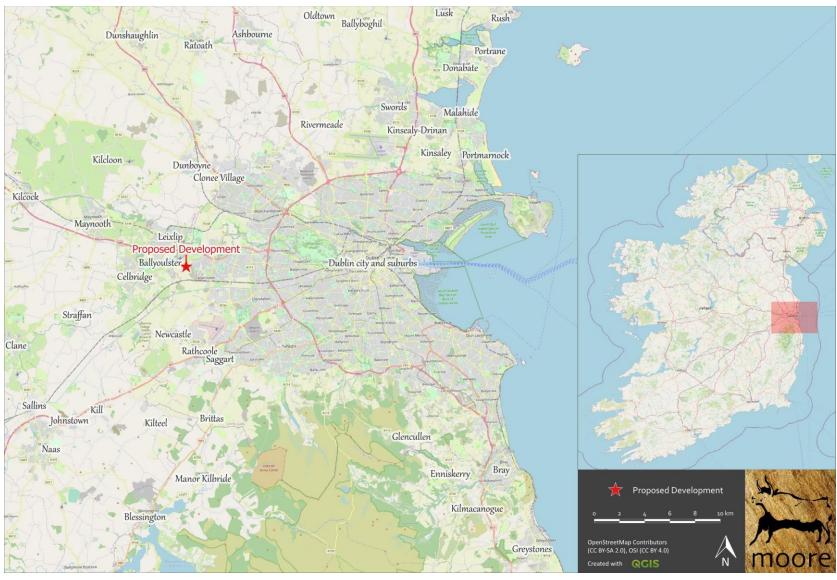


Figure 1. Showing the Proposed Development location at Backweston, Co. Dublin.



Figure 2. Showing the Proposed Development boundary on recent aerial photography.

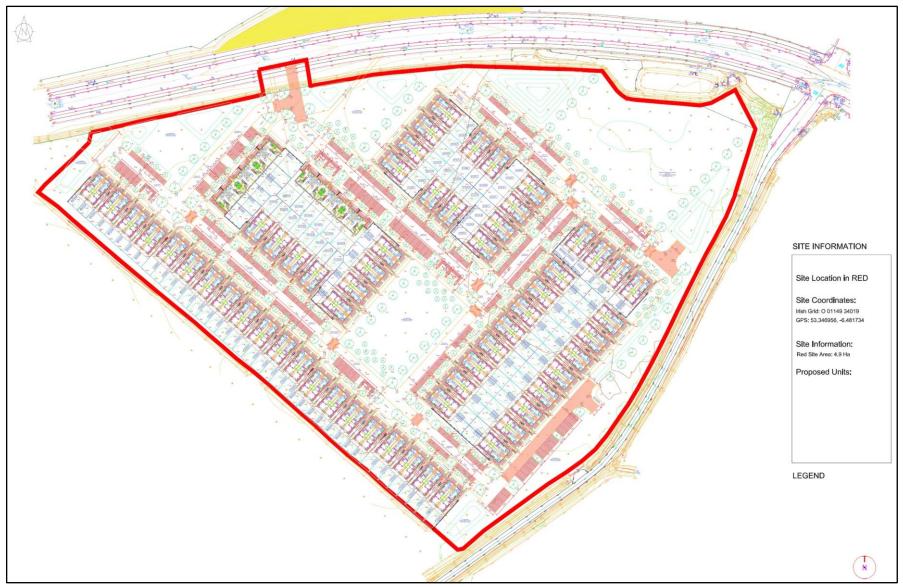


Figure 3. Plan of the Proposed Development.

4. Identification of Natura 2000 Sites

4.1. Description of Natura Sites Potentially Significantly Affected

A Zone of Influence (ZoI) of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. In accordance with the OPR Practice Note (2021), PN01, the ZoI should be established on a case-by-case basis using the Source- Pathway-Receptor framework.

The European Commission's "Assessment of plans and projects in relation to Natura 2000 sites guidance on Article 6(3) and (4) of the Methodological Habitats Directive 92/43/EEC" published 28 September 2021 states at section 3.1.3, that:

"Identifying the Natura 2000 sites that may be affected should be done by taking into consideration all aspects of the plan or project that could have potential effects on any Natura 2000 sites located within the zone of influence of the plan or project. This should take into account all of the designating features (species, habitat types) that are significantly present on the sites and their conservation objectives. In particular, it should identify:

- any Natura 2000 sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;
- any Natura 2000 sites within the likely zone of influence of the plan or project Natura 2000 sites located
 in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by
 aspects of the project, including as regards the use of natural resources (e.g. water) and various types
 of waste, discharge or emissions of substances or energy;
- Natura 2000 sites in the surroundings of the plan or project (or at some distance) which host fauna that
 can move to the project area and then suffer mortality or other impacts (e.g. loss of feeding areas,
 reduction of home range);
- Natura 2000 sites whose connectivity or ecological continuity can be affected by the plan or project".

The range of Natura 2000 sites to be assessed, i.e. the zone in which impacts from the plan or project may arise, will depend on the nature of the plan or project and the distance at which effects may occur. For Natura 2000 sites located downstream along rivers or wetlands fed by aquifers, it may be that a plan or project can affect water flows, fish migration and so forth, even at a great distance. Emissions of pollutants may also have effects over a long distance. Some projects or plans that do not directly affect Natura 2000 sites may still have a significant impact on them if they cause a barrier effect or prevent ecological linkages. This may happen, for example, when plans affect features of the landscape that connect Natura 2000 sites or that may obstruct the

movements of species or disrupt the continuity of a fluvial or woodland ecosystem. To determine the possible effects of the plan or project on Natura 2000 sites, it is necessary to identify not only the relevant sites but also the habitats and species that are significantly present within them, as well as the site objectives.

The Zone of Influence may be determined by considering the Proposed Development's potential connectivity with European sites, in terms of:

- Nature, scale, timing and duration of all aspects of the proposed works and possible impacts, including
 the nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of potential pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Location of ecological features and their sensitivity to the possible impacts.

The potential for source pathway receptor connectivity is firstly identified through GIS interrogation and detailed information is then provided on sites with connectivity. European sites that are located within a potential Zone of Influence of the Proposed Development are presented in Figure 4 below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website (www.npws.ie) on 24 July 2023. This data was interrogated using GIS analysis to provide mapping, distances, locations and pathways to all sites of conservation concern including pNHAs, NHA and European sites.

The Proposed Development is located within the hydrological catchment of the River Liffey. A review of aerial photography, Ordnance Survey Ireland (OSI) mapping and OSI Geographical Information System (GIS) data for rivers and streams indicates that there are no notable surface water features onsite and no direct hydrological pathways to offsite surface water bodies. This was confirmed during fieldwork on habitat assessment on 26 April 2023.

The northern boundary of the site comprises a truncated section of the original arable field in which the Cellbridge Link Road was developed in 2022. This involved rearrangement of the field drainage ditches toward the road drainage and settlement ponds. There is interrupted connectivity thereafter to Leixlip Reservoir. The pathway to the River Liffey is interrupted by these aquatic sinks and the European sites located in Dublin Bay are considered to be outside the zone of influence of the Proposed Development.

The nearest European site is the Rye Water Valley/Carton SAC (Site code 001398) located 1.8km to the north and upstream on the River Liffey. However, there is no connectivity with this site or any European sites with in the zone of influence to the Proposed Development.

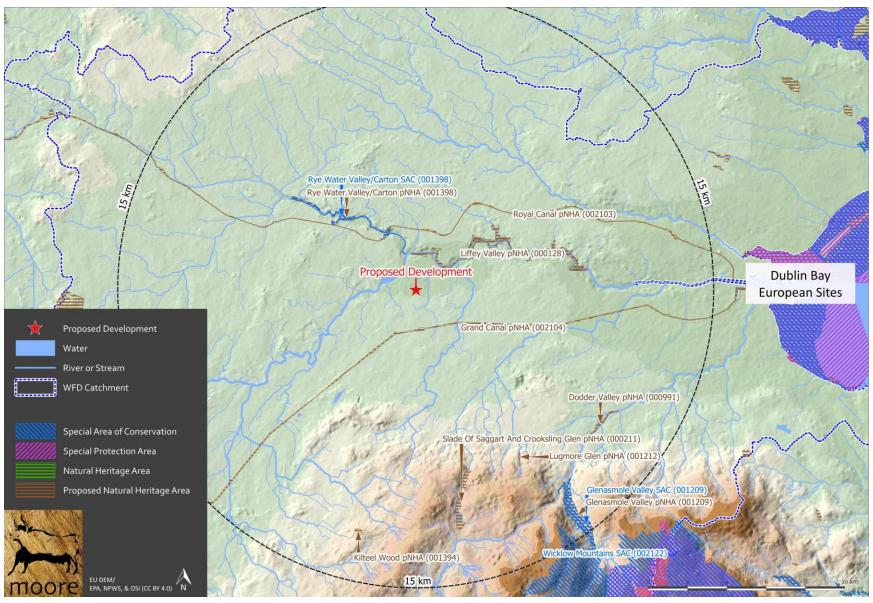


Figure 4. Showing European sites and NHAs/pNHAs within the wider Potential Zone of Influence of the Proposed Development.

4.2. Ecological Network Supporting Natura 2000 Sites

A concurrent GIS analysis of the proposed Natural Heritage Areas (pNHA) and designated Natural Heritage Areas (NHA) in terms of their role in supporting the species using Natura 2000 sites was undertaken along with GIS investigation of European sites. These supporting roles mainly relate to mobile fauna such as mammals and birds which may use pNHAs and NHAs as ecological corridors or "stepping stones" between Natura 2000 sites.

Article 10 of the Habitats Directive and the Habitats Regulations 2011 place a high degree of importance on such non-Natura 2000 areas as features that connect the Natura 2000 network. Features such as ponds, woodlands and important hedgerows were taken into account in the decision process and during the preparation of this AA Screening report.

The NHAs and pNHAs identified in Figure 4 are located outside the Zone of Influence of the Proposed Development.

5. Identification of Potential Impacts & Assessment of Significance

The Proposed Development is not directly connected with or necessary to the management of the sites considered in the assessment and therefore potential impacts must be identified and considered.

5.1. Assessment of Likely Significant Effects

There is no connectivity to the River Liffey or to any European sites within or outside the potential Zone of Influence.

The consideration of all potential direct and indirect impacts that may result in significant effects on the conservation objectives of a European site, taking into account the size and scale of the Proposed Development are presented in Table 3.

Table 1 Assessment of Likely Significant Effects.

Identification of all potential direct and indirect impacts that may result in significant effects on the conservation objectives of a European site, taking into account the size and scale of the project.		
Impacts:	Significance of Impacts:	
Construction phase e.g.	None	

Vegetation clearance

Demolition

Surface water runoff from soil excavation/infill/landscaping (including borrow pits)

Dust, noise, vibration

Lighting disturbance

Impact on groundwater/dewatering

Storage of excavated/construction materials

Access to site

Pests

The Proposed Development site is located within the boundary of a field of Arable Crops.

The Proposed Development is located within the hydrological catchment of the River Liffey. The northern boundary of the site comprises a truncated section of the original arable field in which the Cellbridge Link Road was developed in 2022. This involved rearrangement of the field drainage ditches toward the road drainage and settlement ponds. There is interrupted connectivity thereafter to Leixlip Reservoir. The pathway to the River Liffey is interrupted by these aquatic sinks and the European sites located in Dublin Bay are considered to be outside the zone of influence of the Proposed Development.

Operational phase e.g.

Direct emission to air and water

Surface water runoff containing contaminant or sediment

Lighting disturbance

Noise/vibration

Changes to water/groundwater due to drainage or abstraction

Presence of people, vehicles and activities

Physical presence of structures (e.g. collision risks)

All foul and surface water runoff, once the facility is operational, will be contained on site and discharged to urban drainage systems.

There is no real likelihood of any significant effects on European Sites in the wider catchment area.

The facility is located at a distance of removal such that there will be no disturbance to qualifying interest species in any European sites.

Describe any likely changes to the European site:

Examples of the type of changes to give consideration to include:

Reduction or fragmentation of habitat area

Disturbance to QI species

Habitat or species fragmentation

Reduction or fragmentation in species density

Changes in key indicators of conservation status value (water quality etc.)

None.

The Proposed Development site is not located adjacent or within a European site, therefore there is no risk of habitat loss or fragmentation or any effects on QI habitats or species directly or ex-situ.

It can be noted that the level of development recorded during fieldwork and distance from the coastal SPAs do not present opportunities to support the bird species (predominantly waders) for which the Irish Sea coastal SPAs are designated.

Changes to areas of sensitivity or threats to QI	
Interference with the key relationships that define the structure or ecological function of the site	
Climate change	

5.2. Assessment of Potential In-Combination Effects

In-combination effects are changes in the environment that result from numerous human-induced alterations. In-combination effects can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects as a result of the coming together of two or more effects.

As part of the Screening for an Appropriate Assessment, in addition to the Proposed Development, other relevant plans and projects in the area must also be considered at this stage. This step aims to identify at this early stage any possible significant in-combination effects of the Proposed Development with other such plans and projects on European sites.

A review of the National Planning Application Database was undertaken. The database was then queried for developments granted planning permission within 1km of the Proposed Development within the last three years, these are presented in Table 4 below.

Table 2.Planning applications granted permission in the vicinity of the Proposed Development.

Planning Ref.	Description of development	Comments
SD19B/0471	Retention of single storey living room extension to rear of house and all associated site and drainage works.	No potential for in-combination effects given the scale and location of the project.
SD20B/0133	Construction of a single storey front and side extension with lean to roof; altered front entrance and altered front windows along with the construction of a single storey rear extension with open roof.	No potential for in-combination effects given the scale and location of the project.
SD20B/0155	6sq.m front porch and living room extension to the front of the dwelling; 34sq.m ground floor living/kitchen extension and a 10sq.m first floor bedroom extension the rear of the dwelling and associated demolition/construction work.	No potential for in-combination effects given the scale and location of the project.
SD21B/0061	Retention of a single storey extension to the rear of existing dwelling with a total floor area to be retained of 17.9sq.m.	No potential for in-combination effects given the scale and location of the project.
SD21B/0072	Construct ground floor extension to west (side) elevation (12sq.m) and south (rear) elevation (23.7sq.m) of existing dwelling comprising of one bedroom, living and dining areas and all associated site works.	No potential for in-combination effects given the scale and location of the project.
SD21B/0582	Construction of attic conversion with dormer to rear with flat roof; raising of existing gable wall; associated alterations to the profile of the existing roof along with 'Dutch' hip to side.	No potential for in-combination effects given the scale and location of the project.

Planning Ref.	Description of development	Comments
SD21B/0528	Single storey rear garden home entertainment room and home gym.	No potential for in-combination effects given the scale and location of the project.
SD22B/0299	A pitched roof single storey extension to rear of existing house with associated site works	No potential for in-combination effects given the scale and location of the project.
SD23A/0049	Construction of a gate to facilitate emergency access to lands and to ensure the safe operations of the airport.	No potential for in-combination effects given the scale and location of the project.

The South Dublin County Development Plan in complying with the requirements of the Habitats Directive requires that all Projects and Plans that could affect the Natura 2000 sites in the same potential Zone of Influence of the Proposed Development site would be initially screened for Appropriate Assessment and if requiring Stage 2 AA, that appropriate employable mitigation measures would be put in place to avoid, reduce or ameliorate negative impacts. In this way any, in-combination impacts with Plans or Projects for the proposed development area and surrounding townlands in which the proposed development site is located, would be avoided.

The listed developments have been granted permission in most cases with conditions relating to sustainable development by the consenting authority in compliance with the relevant Local Authority Development Plan and in compliance with the Local Authority requirement with regard to the Habitats Directive. The development cannot have received planning permission without having met the consenting authority requirement in this regard.

There are no predicted in-combination effects given that it is predicted that the Proposed Development will have no effect on any European site.

Any new applications for the Proposed Development area will be assessed on a case by case basis *initially* by South Dublin County Council which will determine the requirement for AA Screening as per the requirements of Article 6(3) of the Habitats Directive.

6. Conclusion

There are no predicted effects on any European sites given:

- The distance between the Proposed Development and any European Sites;
- The lack of direct connectivity between the Proposed Development and any hydrological pathways;
 there are no watercourses within the Proposed Development boundary and there is no connectivity
 between the Proposed Development site and any watercourses that lead to the River Liffey;

- The Proposed Development is to be connected to the existing public sewer network for the treatment of wastewater.
- There are no predicted emissions to air, water or the environment during the construction or operational phases that would result in significant effects.

It has been objectively concluded by Moore Group Environmental Services that:

- 1. The Proposed Development is not directly connected with, or necessary to the conservation management of the European sites considered in this assessment.
- 2. The Proposed Development is not likely to either directly or indirectly significantly affect the Qualifying interests or Conservation Objectives of the European sites considered in this assessment.
- 3. The Proposed Development, either alone or in combination with other plans or projects, is not likely to have significant effects on a European site.
- 4. It is possible to conclude that significant effects can be excluded at the screening stage.

It can be *excluded*, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

An appropriate assessment is not, therefore, required.

A final determination will be made by the competent authority in this regard.

7. References

Department of the Environment, Heritage and Local Government (2010) Guidance on Appropriate Assessment of Plans and Projects in Ireland (as amended February 2010).

European Commission (2007) Guidance document on Article 6(4) of the 'Habitats Directive '92/43/EEC: Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interests, compensatory measures, overall coherence and opinion of the Commission. European Commission, Brussels.

European Commission (2018) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.

European Commission (2021) Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Brussels 28.9.21.

European Commission (2021) Guidance document on the strict protection of animal species of Community interest under the Habitats Directive, Brussels 12.10.21.

NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin.

NPWS (2023) National Parks and Wildlife Service Metadata available online at https://www.npws.ie/maps-and-data

Office-of-the-Planning-Regulator (2021) Appropriate Assessment Screening for Development Management OPR Practice Note PN01. March 2021